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A NEW SUBSPECIES OF PYGMY MOUSE, BAIOMYS MUSCULUS, FROM MORELOS, MEXICO*

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In field studies carried on in Morelos, Mexico, by the Wildlife Management Department, Agricultural and Mechanical College of Texas, a series of 26 specimens of the species Baiomus musculus was collected. Morelos is included in the rather wide range assigned to the subspecies Baiomys musculus by W. H. Osgood (Revision of the Mice of the American Genus Peromyscus, North Amer. Fauna No. 28, 1909). Our series, however, differs significantly from B. m. musculus and other described races, and represents a hitherto unrecognized subspecies.

Baiomys musculus pallidus new subspecies

Type.-Adult female, skin and skull, No. 4501, Texas Cooperative Wildlife Collection; 12 km. NW. Axochiapan, elevation 3500 feet, Morelos, Mexico; July 28, 1950; collected by W. B. Davis, original number 5112.

Range.-Known only from the state of Morelos. Probably occurs throughout the Balsas Basin; specimens from Chilpancingo, Guerrero, show intergradation with Baiomys m. musculus.

Diagnosis.—Size small (see measurements); hind foot short; color a pale grayish; underparts whitish; feet white, with a line of grayish hairs along inner side; tail indistinctly bicolored, brownish above, whitish below, becoming darker toward tip; skull short and shallow; brain case flattened; zygoma narrowing anteriorly, narrow in breadth; rostrum sharply depressed anteriorly, wide, short, and strongly tapering; maxillary tooth row short; nasals moderately short; interparietals wide.

Comparisons.—From specimens of Baiomys musculus musculus, Rio Aguacatillo, 30 km. N. Acapulco, pallidus differs in: smaller size (averaging 11.2 grams compared with 14.2 grams); shorter hind foot (15 mm. compared with 16.5 mm.); upperparts pale grayish as opposed to the brighter grownish of musculus; underparts whitish instead of buff; underside of tail lighter; skull shorter (20.1 mm. compared with 21.0 mm.); zygoma narrowing noticeably anteriorly and narrower in breadth (10.7 mm. compared with 11.5 mm.); brain case flattened; cranial depth shallower (6.7 mm. compared with 7.1 mm.); rostrum sharply depressed anteriorly and strongly tapered laterally; maxillary tooth row shorter (3.0 mm. compared with 3.2 mm.).

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Compared with B. m. brunneus, Plan del Rio, Veracruz, pallidus differs as follows: Smaller size (males 11.4 grams compared with 13.2 grams); pale grayish in color, as opposed to the dark brownish of brunneus; nasals longer (7.7 mm. compared with 7.0 mm.); interparietals broader (7.7 mm. compared with 7.0 mm.) and longer (2.0 mm. compared with 1.5 mm.).

Close comparison with B. m. nigrescens is not necessary. According to Osgood's description of nigrescens (1909), pallidus differs in lighter color, wider interorbital constriction (3.7 mm. compared with 3.4 mm.), and wider interparietals (7.7 mm. compared with 6.4).

Remarks.—Among the previously described subspecies of Baiomys musculus, pallidus more closely approaches musculus which occurs to the west. But musculus is a larger darker animal; with a larger skull, deeper brain case, and more widely spreading zygoma. The molar teeth are larger. The rostrum is longer, narrower, and only slightly tapered as compared with pallidus.

This newly described race, pallidus, inhabits the eastern section of the range formerly assigned to musculus in the arid semi-desert Balsas Basin. Specimens from Chilpancingo, Guerrero, are pale in color and match B. m. pallidus in weight. However, cranial and external measurements are comparable to those of B. m. musculus. Specimens from Chilpancingo can be regarded as intergrades between pallidus and musculus.

Measurements.—The type specimen, as follows: Total length, 120 mm.; length tail, 49 mm.; length hind foot, 15 mm.; greatest length skull 20.1 mm.; basilar length, 15.0 mm.; zygomatic breadth, 10.7 mm.; length nasals, 7.7 mm.; shelf of bony palate, 2.9 mm.; palatine slits, 4.1 mm.; diastema, 4.9 mm.; post palatal length, 7.2 mm.; length maxillary tooth row, 3.0 mm.; interparietal breadth, 7.7 mm.; length interparietal, 2.0 mm.; interorbital constriction, 3.7 mm.; cranial depth, 6.7 mm.; weight, 10.5 grams. The averages of 5 females and 5 males from Morelos are respectively: 117 (120.8); 46.4 (45.8); 15.0 (15.0); 19.9 (20.0); 15.0 (15.1); 10.4 (10.5); 7.6 (7.7); 2.9 (2.8); 4.2 (4.4); 4.8 (4.8); 7.2 (7.4); 3.0 (3.1); 7.8 (7.6); 2.1 (2.3); 3.7 (3.7) 6.7 (6.7); weight, 109 (11.4).

Specimens examined.—From Morelos, 26, as follows: Axochiapan, type locality, 5; Jonacatepec, 9; Yautepec, 1; Alpuyeca, 2; Tepoztlan, 9.